

## CLAIMS

1. A surface treatment method using electric discharge, the method comprising the steps of:

generating an electric discharge, in a pulse form,  
5 between an electrode and a workpiece in a working liquid containing no carbon components, the electrode being formed with a material having a solid lubricant effect; and  
adhering and depositing the material of the electrode consumed or melted due to the generated electric discharge  
10 onto a surface of the workpiece thereby forming a coat having lubricant effect on the surface of the workpiece.

2. The surface treatment method using electric discharge according to claim 1, wherein the material having solid  
15 lubricant effect is molybdenum, molybdenum disulfide, boron nitride,, tungsten disulfide, carbon, silver, gold, lead, tin, indium, nickel, or turcite, which is a compound of carbon and fluorine.

20 3. The surface treatment method using electric discharge according to claim 1, wherein the working liquid containing no carbon components is water.

4. An electrode, for discharge surfaced treatment, used  
25 for carrying out a surface treatment method using electric

discharge, wherein the electrode being a powder compressed electrode obtained by compression-molding powder of molybdenum, molybdenum disulfide, boron nitride, tungsten disulfide, carbon, silver, gold, lead, tin, indium, nickel, or turcite, which is a compound of carbon and fluorine, or a metal electrode comprising one or more of these components.